

disappear; then the eructations cease, together with the vomiting or diarrhoea; the digestion becomes less and less laborious, the tongue gradually receives its normal form and colour, and, if the use of the subcarbonate is continued, the appetite increases from day to day, the yellow tint of the countenance disappears, and the face becomes coloured at the same time as it ceases to be shrivelled.

The subcarbonate of bismuth is perfectly insipid, and excites no repugnance. It is given before meals. Adults take it in a little water, and children in honey. It may also be made into lozenges. The dose for adults is from one to three grammes, taken three times a day, in increasing doses.—*Brit. and For. Med.-Chir. Review*, July, 1857, from *Bull. de Thérap.*, Feb. 15, 1857.

14. *A New Principle of Colchicum autumnale*.—M. OBERLIN has just communicated to the Academy of Sciences at Paris some observations on the *Colchicum autumnale*, from which he has extracted a neutral crystalline principle which he calls *colchicéine*, and which differs from *colchicine*, a complex and uncrystallizable product. The properties of *colchicéine* are, to crystallize very easily in pearly laminae, and to be almost completely insoluble in water, but to communicate to this fluid a slight bitterness, which increases sensibly when it is boiled. At this temperature a notable part of the product is dissolved, but is deposited immediately after cooling. The solvents of *colchicéine* are alcohol, ether, methylated spirit, and chloroform, which contract, when mixed with it, a very intense and persistent bitterness. The alcoholic solution of *colchicéine* is coloured by the addition of bichloride of platinum, but no precipitate is formed. Pure concentrated nitric acid dissolves *colchicéine*, and becomes coloured of a very intense yellow tint, passing into a violet colour, then to a deep red and a clear red, and finally returning to its primitive yellow colour. Concentrated sulphuric acid forms with it a solution of a very intense yellow colour, which is preserved even when it is diluted with water, and brownish flocculi are formed in it. Hydrochloric acid dissolves it with a clear yellow colour. The acetic acid also dissolves it, but without change of colour. *Colchicéine* is soluble in ammonia, and crystallizes by evaporation in the air; and it dissolves in caustic potash. It is unalterable in the air; it has no effect upon turmeric paper or litmus paper; exposed to heat, it first softens and afterwards fuses at 155° (Cent.?). The elementary composition of *colchicéine* is  $C_{62}, 83+H_6, 60+N_4, 19+O_{26}, 38=100, 00$ .—*Ibid.*, from *L'Union Méd.*, Jan. 10, 1857.

15. *Ether and Chloroform Gelatinized*.—Professor RUSPONI has succeeded in turning ether and chloroform into gelatine, by shaking them with white of egg in a closed receiver. The compound obtained with the ether is semi-transparent; with the chloroform it is white and opaque. This gelatine is soluble in water, and may be spread on linen in the form of a poultice. It will likewise mix with morphiae, cantharidine, conicine, &c., and may thus become of great therapeutical use.—*Lancet*, August 8, 1857.

16. *Manganese cum Potassa*.—MR. WEEDEN COOKE (*Lancet*, Aug. 8) extols this new preparation as a valuable caustic in cancer. "This caustic," he says, "contains a very large quantity of oxygen, and would seem to act by imparting this to the tissues, thus producing a chemical combustion. The pain produced is much less than that of any other caustic, and in some instances after the first minute or two there is no pain at all, and I have observed no after ill consequences. This 'manganese cum potassa' caustic is a dark green powder, and may be applied very readily by means of a small pepper castor. A thin coating of it will remove instantly all unpleasant odour from the ulcer, and when used for reducing the exuberant growth, must be applied in a layer as thick as the tissue to be destroyed. By dropping a few drops of water upon the powder after it is applied, it will form a paste, and adhere to the part, after which simple dressing may be applied. By means of carrot poultices the eschar drops off in three or four days. If necessary, the manganese is reapplied in the same easy way until the diseased mass is all destroyed, and the subjacent healthy tissues granulate and cicatrize by means of a slightly stimulating

lotion of chlorate of potash. Velpeau has a high opinion of the sulphuric acid, but could not succeed in making a paste with it to limit its action. This new combination of manganic acid and potassa will, I hope, attract his attention, and supply him, as well as my own countrymen, with an efficacious caustic, convenient for application, less painful than all others, and free from injurious effects upon the constitution. The well-known antiseptic effects of manganic acid suggests its use in all foul and phagedænic ulcers, and I have no doubt that large crops of warts may be conveniently removed by its agency."

17. *Corrosive Sublimate and Collodion as an Escharotic.*—Dr. MACKE states (*Medicinische Cent. Zeitung*), that he has used with advantage an escharotic composed of one ounce of collodion to one drachm of corrosive sublimate. He has used it principally in nævi, and small excrescences which patients wish to get rid of without the use of the knife. It is applied with a camel's hair pencil, dries rapidly, and cannot be rubbed off easily. Applications of cold water may be made in cases where the inflammation runs high, without interfering with the action of the caustic. The eschar is thin, and falls off after three or mostly six days; pain is very slight, and the author has not found that any absorption of the bichloride takes place.—*Brit. Med. Journal*, Aug. 1, 1857.

## MEDICAL PATHOLOGY AND THERAPEUTICS, AND PRACTICAL MEDICINE.

18. *Etiology of Diabetes. Diabetic Sugar not the same as the Sugar produced in the Liver in Health.*—Dr. G. OWEN REES, in his valuable Croonian lectures, recently delivered before the Royal College of Physicians, makes the following interesting remarks on this subject:—

"According to M. Bernard, we have not now to determine how a substance, foreign to the healthy constitution of the blood, becomes engendered in the system, but merely to inquire into the causes producing, on the one hand, an over-activity in the sugar-forming action of the liver, or, on the other, the diminution of the destructive power apparently possessed by the blood in health over that sugar when it has mingled with the circulating fluid.

Now, all this is clear enough were the sugar secreted by the liver, and that produced by injuring the base of the fourth ventricle, identical with that existing in the urine of true diabetes. This, however, is not the case, and we are not, therefore, so nearly about to unravel the difficulty as we might, at first, be inclined to believe.

About two years ago, I took the opportunity of obtaining blood from the hepatic veins of a dog, in order to determine the presence of sugar; for, like many others, I was, at first, a little incredulous. By the assistance of my friend, Mr. Hilton, this was effected without much difficulty.

On examining the blood obtained in this way, I found, it is true, that it yielded me sugar; but there was a peculiarity in the reaction of the tests, which led me to suspect I was not dealing with the same sugar as that contained in the urine of diabetes. It was quite impossible for me at the time to undertake a chemical investigation of the subject, and I was not sufficiently satisfied with my results to venture on publication. Some months ago, I mentioned my suspicions to my friend, Dr. Pavy, who has thrown much light on this interesting subject, and he told me that the same doubt had occurred to him some time since, and he immediately showed me from his note-books that he had worked the question out very satisfactorily, though he had not published on the point. Having Dr. Pavy's permission to do so, I will now detail the results of his investigations. It appears that the principal point of difference between these sugars consists in the greater facility possessed by the hepatic sugar, and by the sugar of *artificial* diabetes, of undergoing destruction by contact with animal tissue. This has been shown by an experiment made on